

MIT's Oldest and
Largest Newspaper

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WEATHER, p. 2

	TUE: 34°F 28°F
	Heavy snow
	THU: 27°F 13°F

Tuesday, February 4, 2014

MIT names Schmidt provost, Barnhart chancellor

Provost to push for two new Institute-wide initiatives with health, environment focus



DOMINICK REUTER, COURTESY OF THE MIT NEWS OFFICE

Martin Schmidt, Provost

By Bruno B.F. Faviero and Leon Lin
EDITORS

President L. Rafael Reif on Monday announced the appointment of Martin A. Schmidt PhD '88 as provost, the most senior academic position in the administration.

Schmidt had served as acting provost since former Provost Chris Kaiser PhD '88 returned to the faculty in November after a term of just 16 months.

Provost, Page 15

Schmidt said in an interview his priorities as provost include MITx and digital learning, campus renewal and development, and a suite of interdisciplinary, MIT-wide initiatives aimed at tackling some of the world's most daunting challenges.

Those initiatives include the MIT Energy Initiative, which conducts energy research with environmental and economic concerns in mind, and the Innovation Initiative, which seeks to boost innovation in manufacturing through both engineering and policy research.

The Innovation Initiative was announced only last October, but Schmidt said he hopes to see two more such initiatives — related to health and the environment — "by the next year or so."

He would like these new initiatives to replicate the success of MITEI. "MIT is the go-to place when it comes to energy," he said, citing the appointment of former MITEI director Ernest Moniz as Obama's secretary of energy as an example of the initiative's national influence.

The new initiatives should create new opportunities for additions to the undergraduate curriculum and new collaborations between departments, Schmidt said.

The push for these Institute-wide initiatives dates back to Susan J. Hockfield's presidency, when MITEI was born, and to Reif's inaugural

Chancellor seeks restored student trust in administration, wants input from students



DOMINICK REUTER, COURTESY OF THE MIT NEWS OFFICE

Cynthia Barnhart, Chancellor

By Leon Lin
NEWS EDITOR

MIT's new chancellor, and the first woman to hold the post, is Cynthia Barnhart, President L. Rafael Reif announced on Monday. As chancellor, Barnhart oversees student life and education.

In an interview, she focused on student life issues, including students' "culture of ex-

perimentation and risk-taking" and the problem of sexual assault on campus.

Barnhart, previously the associate dean of the School of Engineering, succeeds former Chancellor Eric Grimson PhD '80, who was tapped to head the Institute's fundraising campaign.

She said her priority now is understanding students' needs. She did not provide specific plans, saying that she did not want to start with "preconceived ideas of what [they] need me to do."

"I hope students will welcome me into their dining halls and come to meetings with me. I really want to listen," she said. "That's, I think, step one."

She said that in discussions with students she had become aware of "some distrust of the administration," and that she would make more communication and more transparency a goal.

Barnhart assumes her new role less than a year after the closure of Bexley Hall, an undergraduate dormitory known for its alternative culture, and the release of a report related to the late Internet activist Aaron Swartz that prompted another round of introspection about "hacker culture" at the Institute. In the interview, Barnhart encouraged some aspects of MIT's student culture but expressed reservations about others.

Barnhart, Page 13



An employee from Thalmic Labs presents a demo of Myo, a gesture control armband, during Techfair this past Monday, Feb. 3. Techfair, held in Rockwell, featured demos from companies as well as student projects, and was held in the same location as the Tau Beta Pi Career Fair.

IN SHORT

Classes start today! Registration must be submitted to the Registrar's Office by the end of Friday, Feb. 7. Failure to do so may result in a \$50 late fee.

Quarter 3 PE classes start Monday, Feb. 10. Registration for PE classes ends Wednesday, Feb. 5 at 1 p.m.

W20 Locker Rentals are now available. For more information, please visit <http://studentlife.mit.edu/cac/>

Pre-order your Technique 2014 yearbook by Monday, Feb. 10. The cost is \$90. Visit <http://technique.mit.edu/buy> to place an order.

Send news information and tips to news@tech.mit.edu.

DOJ to pursue death penalty for Tsarnaev

Federal courts in Massachusetts get second pending death penalty case

Milton J. Valencia
THE BOSTON GLOBE

The Department of Justice said Thursday that it will seek the death penalty for Dzhokhar Tsarnaev, the alleged Boston Marathon bomber, citing the "heinous, cruel and depraved manner" of the attack that killed three people, injured more than 260, and sent a wave of shock and fear into the region.

Noting that Tsarnaev has shown no remorse, federal prosecutors said they would seek the death penalty because of his "betrayal of the United States" and his decision to target the Boston Marathon, "an iconic event that draws large crowds of men, women, and children to its final stretch, making it especially susceptible to the act and effects of terrorism."

US Attorney General Eric Holder authorized federal prosecutors to seek capital punishment if Tsarnaev is convicted, saying, "The nature of the conduct at issue and the resultant harm compel this decision."

The US attorney in Boston, Carmen M. Ortiz, whose office is

prosecuting the case, said, "We support this decision, and the trial team is prepared to move forward with the prosecution."

Miriam Conrad, the head public defender in Massachusetts and one of Tsarnaev's lawyers, said the defense team had no comment.

One of the people injured in the April 15 bombings, Jarrod Clowery, a 36-year-old carpenter from Millville, said he had no emotional reaction to the decision, saying that Tsarnaev and his brother, Tamerlan, an alleged co-conspirator, "were tried and convicted by a power higher than us the moment they did what they did."

"I'm moving on with my life. It has no bearing on my life whatsoever," said Clowery, whose legs were badly burned and struck by shrapnel.

Massachusetts state courts do not permit capital punishment, but Tsarnaev could be sentenced to death because he faces the charges in a federal case. An execution, however, would have to take place in a state that allows the

Death penalty, Page 14

HOW TO DO WELL IN 6.470

What should you know before trying to tackle this IAP classic?

CAMPUS LIFE, p. 4

PLANNING TO ROCK INTERVIEW

Chatting with Jam Rostron about her upcoming album. **ARTS, p. 10**

HOUSE/DIVIDED REVIEW

Play sets *Grapes of Wrath* excerpts against housing crisis. **ARTS, p. 10**



CHILEAN-SPANISH DRAMA DELIGHTS

Gloria explores a middle-aged woman's complex relationships. **ARTS, p. 9**

CHAMPIONS LEAGUE HEATS UP

What to watch for in four great matchups of teams in the Last 16. **SPORTS, p. 20**

SECTIONS

World & Nation	2
Opinion	4
Fun Pages	5
Arts	9
Campus Life	18
Sports	20

Lawmaker says colleges are misleading on aid requirements

Many top colleges are misleading applicants about the paperwork needed to seek financial aid, possibly violating federal law and costing students extra money, a congressman said Monday.

The Department of Education said it was reviewing the allegations by Rep. Elijah E. Cummings, D-Md., the ranking Democrat on the House Committee on Oversight and Reform, based on an investigation by committee staff members.

Under federal law, college students need to fill out just one form to apply for several kinds of aid from the federal government, including Pell grants and loans: the Free Application for Federal Student Aid, known as FAFSA. Before granting aid from their own coffers, hundreds of colleges require both FAFSA and a form created by the College Board, called the CSS/Financial Aid Profile.

The College Board's form is much more complex than FAFSA, and unlike the FAFSA, it is not free, carrying a \$25 fee for the first college a student sends it to and \$16 for each additional one, though the fee can be waived for low-income families.

The problem, Cummings said, is that the instructions on many colleges' websites give the incorrect impression that both forms are required for federal aid. In a letter released Monday, he asked Education Secretary Arne Duncan for help in making sure that colleges "are not creating improper and unnecessary barriers to the federal assistance that is so critical to enabling students to pursue their academic and professional dreams."

In all, the committee staff identified 111 schools whose instructions were misleading, Cummings said, including many of the top schools in the country, like Duke, Stanford, Notre Dame and every member of the Ivy League except Princeton. It also singled out the University of Southern California and Bard College as schools that clearly explain the distinctions between the two applications, and different sources of aid.

—Richard Pérez-peña, *The New York Times*

Native American groups call for investigation of child welfare procedures

DENVER — In a letter presented to government officials in Portland, Ore., the groups said that a federal law intended to keep Indian children from being removed from their families was being routinely sidestepped.

In their letter, the groups wrote that a lack of federal oversight had led to Indian children being improperly placed with non-Indian families by child welfare workers and that tribal representatives were too often left out of custody proceedings. The call for an investigation comes at a time when a law enacted to end the practice of separating Indian children from their parents and placing them in boarding schools and foster homes, the Indian Child Welfare Act of 1978, has come under greater scrutiny.

In 2013, the U.S. Supreme Court ruled on a dispute between the Cherokee father of a child and her white adoptive parents, who lost custody after the father stepped forward to say he had not realized she would be put up for adoption. In that case, the court ruled 5-4 that the child should not have been taken from the adoptive parents, because her father had relinquished his parental rights before her birth and because her biological mother had agreed to the adoption.

Last week, a federal judge in South Dakota approved class action status for a lawsuit filed by the American Civil Liberties Union on behalf of two tribes and Indian parents in Pennington County. The suit alleges that Native American children in the county are being removed from their homes in custody hearings, without sufficient protections.

—Dan Frosch, *The New York Times*

Video shows Egypt police arresting two journalists

By David D. Kirkpatrick
THE NEW YORK TIMES

Mayy El Sheikh contributed reporting.

CAIRO — A leaked video of the arrest of two journalists offered a cinematic close-up on Monday of the new military-backed government's crackdown on dissent: slow-moving footage of a hotel room full of telecommunications equipment set to the thumping, sinister score of the recent superhero movie "Thor: The Dark World."

The video, broadcast Sunday night on a private channel that supports the government and circulated widely over the Internet since then, is the latest salvo in a propaganda campaign by the state-run and pro-military news media. The goal is to paint the arrested journalists — known here as "the Marriott Cell," for the hotel they were arrested in — as part of a terrorist conspiracy.

Both journalists shown in the video are established correspondents who were working for the English language affiliate of Al-Jazeera, the Qatari-owned Pan-Arab news

network. The two, Mohamed Fahmy, an Egyptian-Canadian television producer who previously worked for CNN, and Peter Greste, an Australian correspondent who previously worked for the BBC, have been detained since their arrest on Dec. 29.

The video begins with a close-up of Fahmy's frightened face as police officers walk in the door of the hotel suite he and Greste had used as a studio. The camera pans across laptop computers, television cameras, stage lights, other telecommunications gear and even the toilet. And the video lingers on the cover of a book by Fahmy about Egypt's 2011 uprising, "Egypt Freedom Story."

Al-Jazeera is virtually the only Arabic-language news organization still operating in Egypt that is critical of the military-backed government and supportive of the outlawed Muslim Brotherhood. Since ousting President Mohammed Morsi of the Brotherhood from office last summer, the government has closed down the network's bureaus and arrested several of its journalists. Others suspected of working for Al-Jazeera are often attacked in the

streets by mobs of the government's civilian supporters.

In a statement, Al-Jazeera said the broadcast could prejudice a potential trial, calling it "an attempt to demonize the journalists" and "the latest incident of incitement against the network."

"Our crew were journalists doing their job," said Salah Negm, the news director at Al-Jazeera's English language channel.

Others called the juxtaposition of the ordinary telecommunications equipment with the melodramatic score darkly comic.

"The Ministry of Interior told us so and so, the Ministry of Health told us so and so," Fahmy mimics, pretending to hold a microphone.

The two were among 20 Al-Jazeera journalists charged this week with broadcasting false reports of unrest to help the Brotherhood destabilize Egypt. Fahmy's family says that he is being held at a prison known here as "The Scorpion," where they say he is kept in solitary confinement, deprived of sleep and denied medical treatment for his injured shoulder.

Hacker group accuses Merkel government of helping to spy

By Melissa Eddy
THE NEW YORK TIMES

MUNICH — The Chaos Computer Club, a leading hacker organization based in Germany, filed a criminal complaint against Chancellor Angela Merkel and members of her government Monday, accusing them of violating the law by helping U.S. and British intelligence agencies to spy on German citizens.

The move comes days after U.S. Secretary of State John Kerry visited Berlin to try to smooth over relations that have been strained by revelations of the extent of the National Security Agency's surveillance activities in Germany. While filing the complaint with the Federal Prosecutor General is only a first step in the cumbersome German legal process and does not guarantee that an investigation will be opened, it demonstrates unwillingness by some here to drop the issue.

Along with the International League for Human Rights, based in New York, the 32-year-old hacker group said in the complaint that Merkel's government and German intelligence agencies violated the personal privacy of German citizens through "illegal and prohibited covert intelligence activities, along with aiding and abetting such activities" by tolerating and cooperating with the NSA and the British eavesdropping agency, known as GCHQ.

"Every German citizen has been affected by the massive surveillance of his or her communication data," Julius Mittenzwei, a lawyer and member of the hacker group, said in a statement issued by the Chaos Computer Club. "Our laws protect us and threaten anyone responsible for such surveillance with punishment. Consequently, an investigation by the Federal Prosecutor General is necessary and mandatory by

law."

Germany's debate of the NSA has focused on the extent to which the agency might have broken the law by carrying out surveillance in Germany. Information from documents released by Edward J. Snowden, the fugitive former contractor for the agency, helped fuel the debate.

But in an interview with Hubert Seipel, a reporter for the German public television station NDR, Snowden described the relationship between Germany's foreign intelligence service, known by the initials BND, and the NSA as "intimate."

"They not only share information, the reporting of results from intelligence, but they actually share the tools and the infrastructure," Snowden said.

But he declined to say whether the German service was giving data to the NSA.

WEATHER

Several inches of snow possible tomorrow

By Vince Agard
STAFF METEOROLOGIST

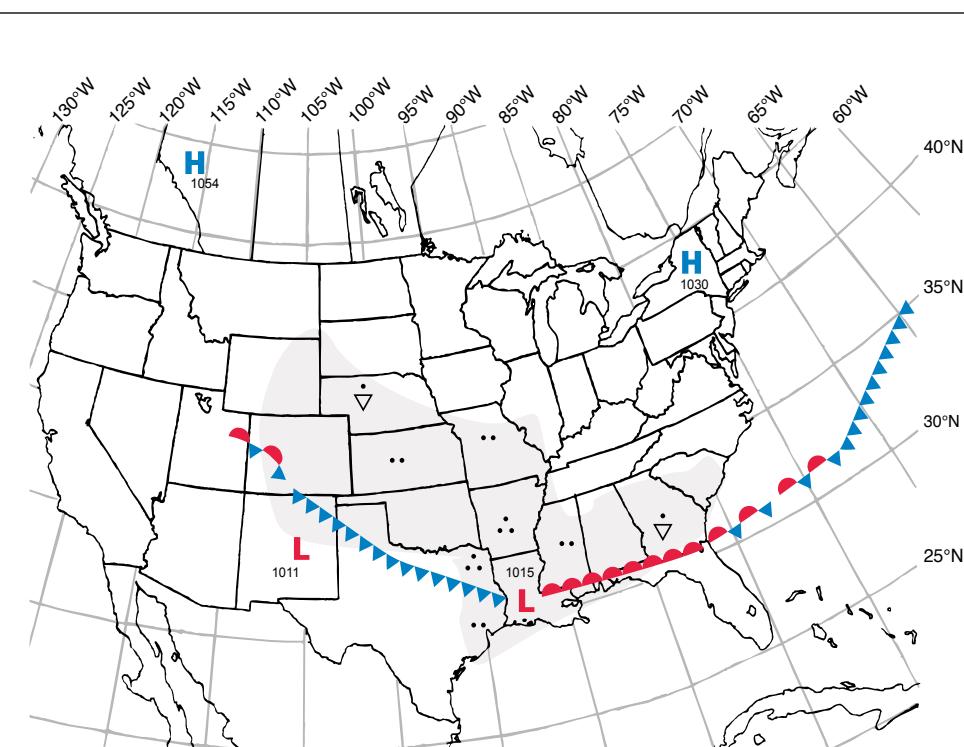
After temperatures got up to 55°F in Boston this past weekend, our area will see accumulating snowfall tomorrow for the second time in three days. While yesterday's all-day snow event was relatively harmless — leaving behind less than an inch of accumulation — tomorrow's event is expected to be more significant. At the time of this writing, the National Weather Service had issued a Winter Storm Watch for "late Tuesday night through Wednesday afternoon," forecasting the possibility of 6 to 10 inches of snow accumulation.

However, snowfall totals for this

storm remain relatively uncertain, as they will be highly dependent on the exact track of the storm. The low pressure center, which has yet to develop, will pass just to the south of New England, spreading heavy precipitation across Connecticut, Massachusetts, and Rhode Island. A southerly perturbation to the storm's track could push the areas of heaviest precipitation away from Boston, while a northerly perturbation would bring warmer temperatures, introducing the possibility for a wintry mix of snow, rain, and ice. Should the areas of heaviest precipitation fall over the Boston area, the Institute could experience heavy snowfall rates of 2 inches per hour during the midday tomorrow.

Extended Forecast

Today: Mostly sunny, high 34°F (1°C). Winds W at 5-10 mph.
Tonight: Increasing clouds, low 28°F (-2°C). Winds S at around 5 mph, becoming E.
Tomorrow: Snow, becoming heavy at times, and possibly mixing with rain or sleet. High 32°F (0°C). Winds NE at 10-20 mph.
Thursday: Mostly sunny, highs in the mid 20s °F (-3°C).
Friday: Mostly sunny, highs near 30°F (-1°C).



Former aide to New Jersey Gov. Chris Christie invokes Fifth

By David W. Chen
and William K. Rashbaum
THE NEW YORK TIMES

A former top aide to Gov. Chris Christie of New Jersey revealed Monday that she would not hand over documents in response to a subpoena from a legislative panel investigating the controversial closing of lanes at the George Washington Bridge last fall, citing her Fifth Amendment right against self-incrimination.

The former aide, Bridget Anne Kelly, informed the panel, through a letter from her lawyer, Michael Critchley, that in addition to the Fifth, she was also invoking the Fourth Amendment in defense of her privacy.

The letter said that the panel's request "directly overlaps with a parallel federal grand jury investigation." It also contended that giving the committee "unfettered access" to her diaries, calendars and electronic devices could "potentially reveal highly personal confidential communications" unrelated to the bridge scandal.

New Jersey Assemblyman John S. Wisniewski and state Sen. Loretta Weinberg, the Democratic leaders of the panel, issued a statement saying they had received the letter and that they "are reviewing it and considering our legal options with respect to enforcing the subpoena."

Kelly looms as a pivotal figure in the scandal. She is the official who wrote an email in August saying, "Time for some traffic problems in Fort Lee," to another Christie ally, David Wildstein at the Port Authority of New York and New Jersey. Wildstein responded, "Got it," and together, they were intimately involved in the lane closings, which occurred over four days in September.

Christie — who repeated on Monday night his insistence that he did not know about the scheme beforehand — later fired Kelly, and also cut ties with her boss, Bill Stepien, who had been Christie's campaign manager in 2009 and 2013.

Still, both Stepien and Kelly have now invoked their Fifth Amendment rights, as Wildstein did dur-

ing a legislative hearing. With some 18 other subpoenas issued by the state Legislature — which is controlled by Democrats — also outstanding, it is possible that others may also follow suit.

Kelly's announcement came several days after one of her subordinates, Christina Genovese Renna, the director of the state's Intergovernmental Affairs, submitted her resignation. Renna, 32, resigned on Friday, the same day Wildstein's lawyer said in a letter that "evidence exists" contradicting the governor's account about when he learned of the lane closings.

In response to questions about the timing of her departure, Renna said in a statement released on Sunday that she had been considering leaving since shortly after the election.

Her lawyer, Henry E. Klingerman, suggested in an email on Monday that as the investigation by the committee, and a preliminary inquiry by federal prosecutors, moves forward, a decision by his client to leave would be more fraught.

Second U.S. bribery trial begins for New York assemblyman

By Mosi Secret
THE NEW YORK TIMES

NEW YORK — In October 2010, William F. Boyland Jr., a state assemblyman from the Brooklyn borough of New York City, shared fine cuts of meat, wine and whiskey with two businessmen who were trying to buy Boyland's political influence.

The men met several more times over the next year — in a hotel room in Atlantic City, N.J., at a Manhattan restaurant and elsewhere — and their talk danced around sordid topics: payoffs, favors and schemes that they said they would hatch together.

The contents of those conversations are not in dispute; the businessmen were undercover agents with the FBI, in a corruption investigation that led to Boyland's arrest on bribery and other charges in November 2011. Every conversation was recorded.

But Boyland's intention in those recorded conversations — once seemingly so certain that Boyland,

43, had planned to plead guilty — is now the subject of dispute, and was at the heart of opening statements as his trial commenced in U.S. District Court in Brooklyn on Monday.

A federal prosecutor, Robert L. Capers, laid out the government's case, built on hours and hours of audio recordings, testimony from the undercover agents who worked the case and testimony from Boyland's former chief of staff, Ryan Hermon, who pleaded guilty to bribery charges and is cooperating with the government.

One of Boyland's lawyers, Nancy L. Ennis, told jurors a different narrative in her opening statement, that of a frustrated federal agent struggling to make a case. She said that Boyland became a government target only when the FBI was stonewalled in its investigation of its original target, former City Councilman Albert Vann. Agents first hoped to use Boyland to reach Vann, Ennis said, but focused on Boyland when that proved ineffective.

Ennis said, "They chased him like Ahab chasing Moby Dick."

But she said that Boyland made them only "hollow promises." She continued, "Most of the things they discussed never materialized."

Boyland is accused of participating in four schemes in a 21-count indictment. Several of the counts stem from allegations that Boyland solicited and accepted bribes in exchange for helping a cooperating witness, who was posing as a carnival promoter, and an undercover agent set up lucrative carnivals in his district. Prosecutors said that in another scheme, Boyland said that he would set up a sweetheart real estate deal worth millions of dollars in exchange for \$250,000.

Boyland is also accused of submitting false travel vouchers to the state Assembly and conspiring to steer state money into a nonprofit that he ran for his personal use. In 2011, he was acquitted of conspiracy to accept bribes in a federal trial in Manhattan.

Genetic tests, healthy children, and ethical doubt

By Gina Kolata
THE NEW YORK TIMES

Her first thought after she heard the news was that she would never have children. Amanda Baxley's doctor had just told her she had the gene for Gerstmann-Straussler-Scheinker disease, or GSS, which would inevitably lead to her slow and terrible death. This rare neurological disease had stalked her family for generations.

On the spot, Baxley, 26, declared she would not let the disease take another life in her family line, even if that meant forgoing childbirth. The next day, her boyfriend, Bradley Kalinsky, asked her to marry him.

But the Kalinskys' wedded life has taken an unexpected turn, one briefly described Monday in *The Journal of the American Medical Association Neurology*. Like a growing number of couples who know a disease runs in the family, they chose in vitro fertilization, and had cells from

the embryos tested for the disease-causing gene.

Only embryos without the gene were implanted in her womb. The Kalinskys are now parents of twin 3-year-olds and a 9-month-old, children who will be free of the fear of GSS.

The in vitro fertilization and testing are expensive but they make it possible for couples to ensure that their children will not inherit a faulty gene and to avoid the difficult choice of whether to abort a pregnancy if testing of a fetus detects a genetic problem.

But the procedure raises ethical questions that trouble advocates for the disabled and have left some doctors struggling with what they should tell their patients. When are prospective parents justified in discarding embryos? Is it acceptable, for example, for diseases like GSS, that develop in adulthood? Eliminating embryos with such genes is essentially saying someone like Kalinsky should never have been born, he said.

"In the medical community, the lack of knowledge about PGD is a serious concern," said Dr. P. Murali Doraiswamy, a dementia researcher at Duke University Medical Center and an author of the new paper, referring to pre-implantation genetic diagnosis.

Ethicists are divided about use of the method.

Janet Malek, a bioethicist at the Brody School of Medicine at East Carolina University, said people who carry a gene like GSS have a moral duty to use pre-implantation diagnosis — if they can afford it — to spare the next generation.

But David Wasserman, an ethicist at Yeshiva University and consultant to the department of bioethics at the National Institutes of Health, says there is no obligation to use it for diseases that do not start until adulthood. Eliminating embryos with such genes is essentially saying someone like Kalinsky should never have been born, he said.

Student kills 2 at Moscow school

MOSCOW — A student opened fire in a high school in northern Moscow on Monday, killing a police officer and a teacher and holding two dozen other students hostage before being captured by police, a spokesman for Russia's Interior Ministry said.

The shooting, which occurred at School No. 263 in the Otradnoye neighborhood, forced the evacuation of hundreds of students. Others remained inside the school and another one adjacent to it as police searched for the gunman. No students were injured.

"The school secretary came in, and she said not to let the children out," said Maria Shukvina, a ninth-grader at the school. "Then I heard a loud bang, and she came back and told us to get our things and get out as quickly as possible."

The spokesman said at least one other police officer was injured when the student fired from a window of a biology lab, where he had held the hostages. As of Monday afternoon, the identity of the student had not been disclosed, nor had any possible motive.

School shootings are rare in Russia, and the events Monday prompted unnerving comparisons in Russian news accounts to those that have occurred in the United States.

—Andrew Roth, *The New York Times*

Legal duo seeks role in new gay marriage cases

WASHINGTON — Theodore B. Olson and David Boies, the star legal duo who defied skeptics by successfully challenging California's ban on same-sex marriage, are seeking to play a central role in the next round of marriage cases that appear to be on a fast track to the high court. But in doing so, they have touched off a debate over who gets the coveted job of arguing what could be a landmark gay rights decision.

Olson, a towering figure in the conservative legal movement, and Boies, a celebrated trial lawyer who argued against Olson in *Bush v. Gore*, say they would like to take on a pair of appeals looking to overturn laws in Utah and Oklahoma that prohibit gay and lesbian couples from marrying.

The push by the two lawyers to involve themselves underscores how suddenly and unexpectedly these cases have become the focus of both gay rights advocates and those who want to see the Supreme Court halt the wave of recent decisions that have undercut state bans on same-sex marriage.

The path to the Supreme Court has come much faster than anyone, perhaps even the justices themselves, expected. The Utah case, in which the state is appealing a lower-court ruling that said the state's prohibition of same-sex marriage was unconstitutional, will be argued on April 10 before the 10th U.S. Circuit Court of Appeals, in Denver. The same three-judge panel that hears the Utah case will hear arguments in the Oklahoma case a week later.

—Jeremy W. Peters, *The New York Times*

Sudan orders Red Cross to halt its humanitarian operations

KHARTOUM, Sudan — The Sudanese government has ordered the International Committee of the Red Cross, which helps well more than 1 million people in conflict areas in Sudan, to suspend its operations in the country, the organization said Sunday.

According to the state-run Sudanese News Agency, the government determined that the group had not fulfilled the conditions for aid efforts.

"The ICRC has not met the state's guidelines for humanitarian work, which has made us suspend its work until we reach an understanding," Suleiman Abdelrahman, an official with the government's aid commission, told the news agency.

In an interview, a representative of the Red Cross declined to elaborate on the source of the problem, but the group said it was in talks with Sudanese officials to resolve the matter.

The Sudanese government has long had confrontations with foreign aid groups operating on its soil. In 2012, Sudan expelled four aid agencies working in impoverished eastern Sudan, and the access of such groups to the conflict zones of South Kordofan state and Blue Nile state, where fighting erupted in 2011, has been restricted.

In 2009, Sudan expelled 13 Western aid organizations working in Darfur, shortly after the International Criminal Court issued an arrest warrant for President Omar al-Bashir, accusing him of committing mass atrocities there.

—Isma'il Kushkush, *The New York Times*

IMAX faces a threat in China over its technology

LOS ANGELES — "We've got the future under control," contends OmniCorp, the giant technology corporation in "RoboCop," a blockbuster remake set for release by Sony Pictures and MGM next month.

Imax, whose huge screens will play a 2-D version of "RoboCop" starting Feb. 12 in the United States, has a wary eye on the Chinese market, where the same film will open 16 days later, in 3-D, on a competing set of large screens.

That will happen with the support of a government-owned company, China Film Group, which both controls the import of films to China and oversees the competing large-screen system. The issue is especially sensitive for Imax: Not only could competitors in China cut into its potential market share there, but Imax has charged in several courts that the Chinese system relies on technology that was stolen from its offices in Canada.

Imax's misappropriation claims are centered on Gary Tsui, a former Imax software engineer who is accused of taking the company's technology and using it to found or provide engineering help to low-cost Chinese rivals.

—Michael Cieply, *The New York Times*

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LETTERS TO THE EDITOR

Learning by tearing down walls

I walk by Bexley many times a day and wonder when the action will start! Not just destructive action, but constructive learning action! By this I mean many students (and faculty!) were admitted to MIT because in their youth they took stuff apart and were innately curious about how things worked (and didn't)! Hence since Bexley Hall has been found by experts to be structurally deficient to the point where it is less costly to tear it down and start over, it represents an invaluable learning experience for the MIT community!

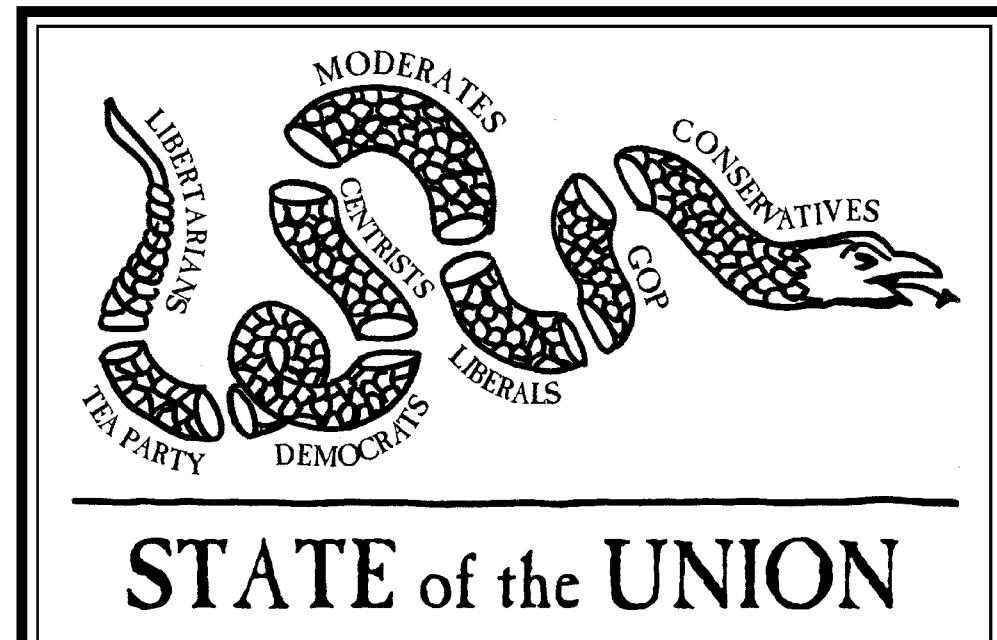
How about we tour the building with the experts, and challenge the students (and faculty) to assess what they see. Make problem sets from the sights! Then compare notes with the experts and learn! Next, learn from/with the experts *how* to take it down most efficiently and with minimal impact on the close environments. And of course, *design* the next building!

The opportunities are priceless both for a Mens et Manus learning experience, and a community building experience.

What about the cost? This may add to the cost of the project! Ah, but future alumni who would be so happy with this experience would probably write bigger checks to more than cover the added short term cost.

I volunteer to help with the cookouts, problem set writing, nice long thinking walks or runs to contemplate the issues, and of course to push the button!

*Alexander Slocum
Pappalardo Professor of
Mechanical Engineering*



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Slocum

CORRECTIONS

To clarify an article about the format of 3.091 published in the Wednesday, January 29 issue of *The Tech*, 3.091 is returning to a lecture format for the Spring 2014 semester. No decisions have been made on whether to continue the online assessment format for Fall 2014 and beyond. A full report on the class will be submitted late February.

In the Year in Review, the article about leadership changes in 2013 incorrectly spells the interim Director of Libraries' name. His name is Steven Gass, not Steven Glass. Also, John Charles became VP of IS&T Jan. 1, not Dec. 10. The related infographic also misspells Gass' name and incorrectly states Charles' effective leadership date. Bertschinger was announced as Institute Community and Equity Officer in June, not July. To clarify, for rows with two dates, the first refers to the predecessor's month of resignation while the second refers to the month of the successor's appointment.

OPINION POLICY

Editorials are the official opinion of *The Tech*. They are written by the Editorial Board, which consists of Chairman Annia Pan, Editor in Chief Austin Hess, Managing Editor Judy Hsiang, and Opinion Editor Jacob London.

Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to letters@tech.mit.edu. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

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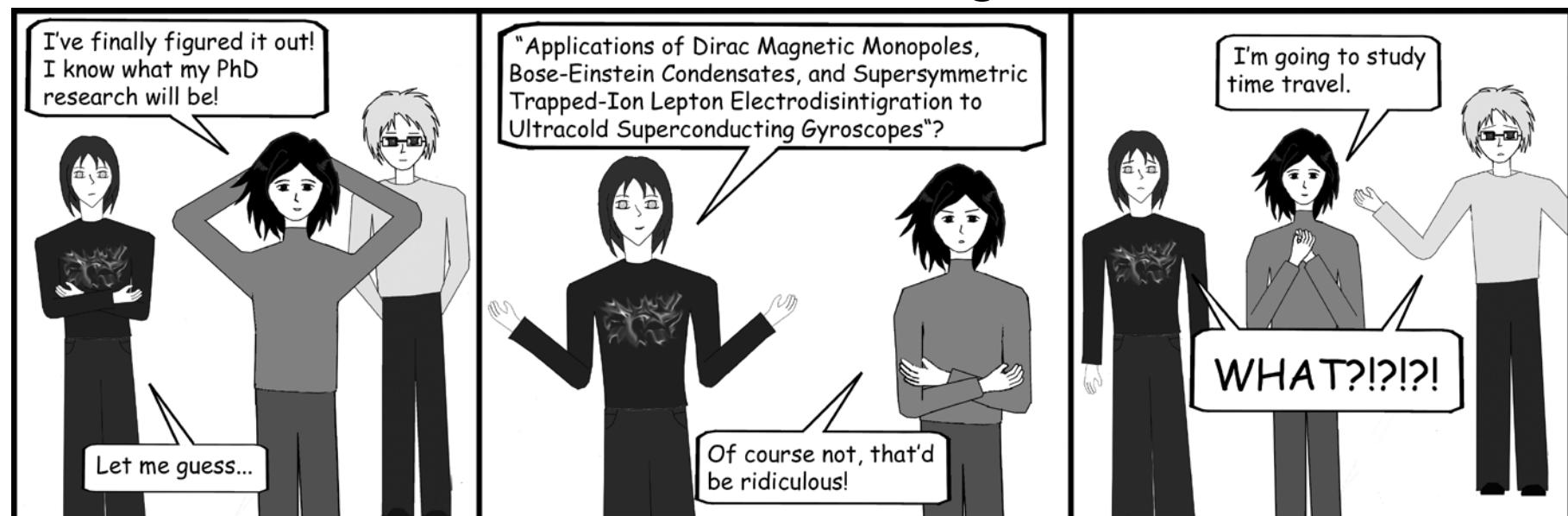
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Somewhere on the Search for Meaning by Letitia Li



Q.E.D. (QUITE EASILY DONE)

BY ERIKA TRENT

REGISTRATION DAY: YOUR LAST DAY TO "RELAX" BEFORE THE SEMESTER STARTS

FEB 3 **SPRING REG DAY!!**

- 9:30 Meeting with advisor
- 11:00 Lab Meeting
- 12:10 Student Society Exec meeting
- ~~12:35 Breathe?~~ → Arrive 15 min early to set up tables!
- 12:37 Buy textbooks
- 15:15 Meet w/ Concentration Advisor + submit forms!
- 17:30 Dorm floor meeting
- 18:10 Catch up on sleep in advance

EB 4
First Day
of Classes

I'M ALREADY BEHIND



Saturday Stumper

Solution, page 15

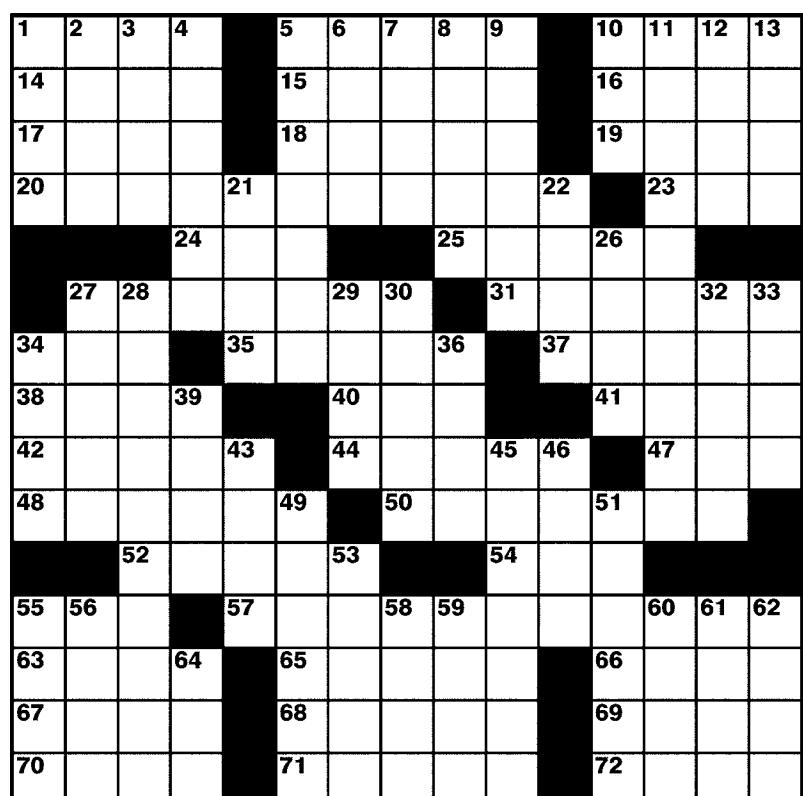
ACROSS

- 1 Four bells, at sea
- 6 Take the lead
- 15 2013's cheapest city for dinner, per TripAdvisor
- 16 Big wheel
- 17 DiCaprio, at the end of Catch Me If You Can
- 18 Their emblem is the Eagle, Globe, and Anchor
- 19 Scanty
- 20 Moves with trunks
- 21 Grad students, frequently
- 22 Retro golf wear
- 23 Small choirs
- 25 Short petition
- 26 Mirrors
- 28 Word from Old French for "hold firmly"
- 29 Person often courted
- 30 Big name in harmless weaponry
- 31 Modern bookmark
- 32 Ride
- 33 TV genre
- 35 Wheels, bricks, etc.
- 39 It may lie in a bed
- 40 Moody's lowest investment-grade rating
- 41 The Gemini's mother
- 42 They're not talking
- 45 World __
- 46 Stay behind
- 47 Home of Cinecittà Studios

- 48 Wagner portraitist
- 50 Artery, for short
- 51 Proprietor of imaginepeace.com
- 52 Go-getting
- 53 What's the matter?
- 55 How many drive
- 57 Go-getter
- 58 Inconsequential
- 59 Forsyte Saga wife
- 60 It's duller than cobalt
- 61 Molasses, essentially

DOWN

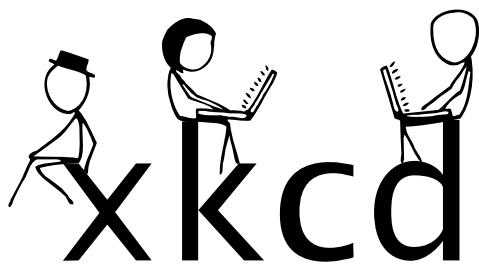
1 Post-apocalyptic best-seller of '78
2 Good garden-tool cleaner
3 Plugging or mugging, perhaps
4 Unskilled
5 Uriah in The Greatest Story Ever Told
6 Tumultuous
7 Where Goddard launched 31 rockets,
1930-41
8 Antagonism
9 Surname of two Massachusetts
Constitution coauthors
10 Former Project Runway judge
11 It's in the center of similes
12 Charged
13 Close relative of 14 Down
14 Private line
24 Unpolished
25 "The Universal Car"
27 Its collection includes Rivera's
Flower Carrier



- 29 Struggle
- 32 Cocoa relative
- 34 Interns' workplaces
- 35 Cuddle up
- 36 Buccaneer
- 37 Software staple
- 38 Demonstrator, e.g.
- 40 Tube-top kin
- 42 Renders romantically

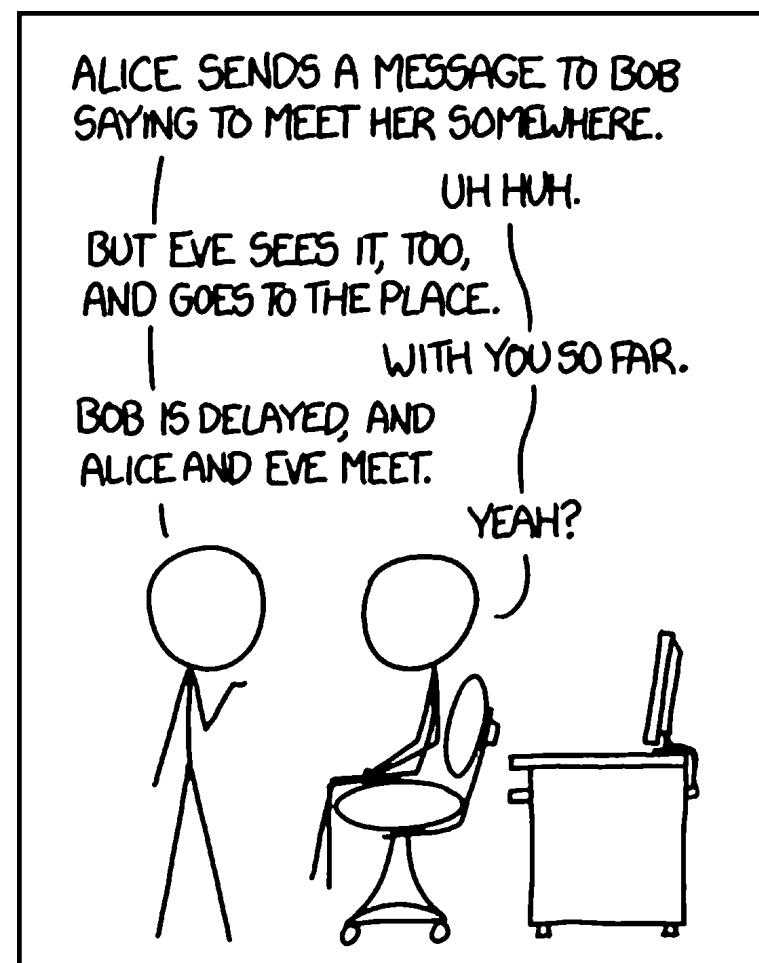
- 43 '70s Asian leader
- 44 Its genome is 100 times larger than humans'
- 45 Prada competitor
- 48 Soul ancestor
- 49 Analyze This director
- 52 Circus structure
- 54 Disraeli or Churchill
- 56 Land on

[1323] Protocol



A WEBCOMIC OF ROMANCE,
SARCASM, MATH, AND LANGUAGE

by Randall Munroe

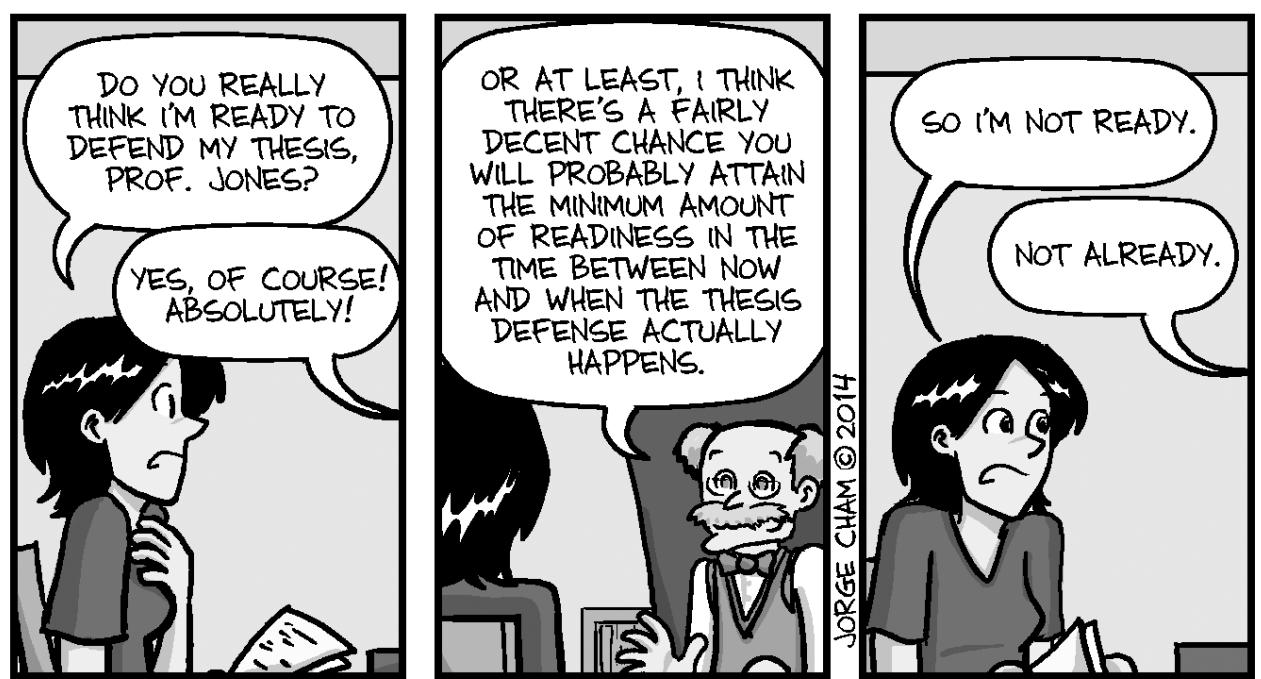


I'VE DISCOVERED A WAY TO GET COMPUTER
SCIENTISTS TO LISTEN TO ANY BORING STORY.

Changing the names would be easier, but if you're not comfortable with lying only making friends with people named Alice, Bob, Carol, etc.



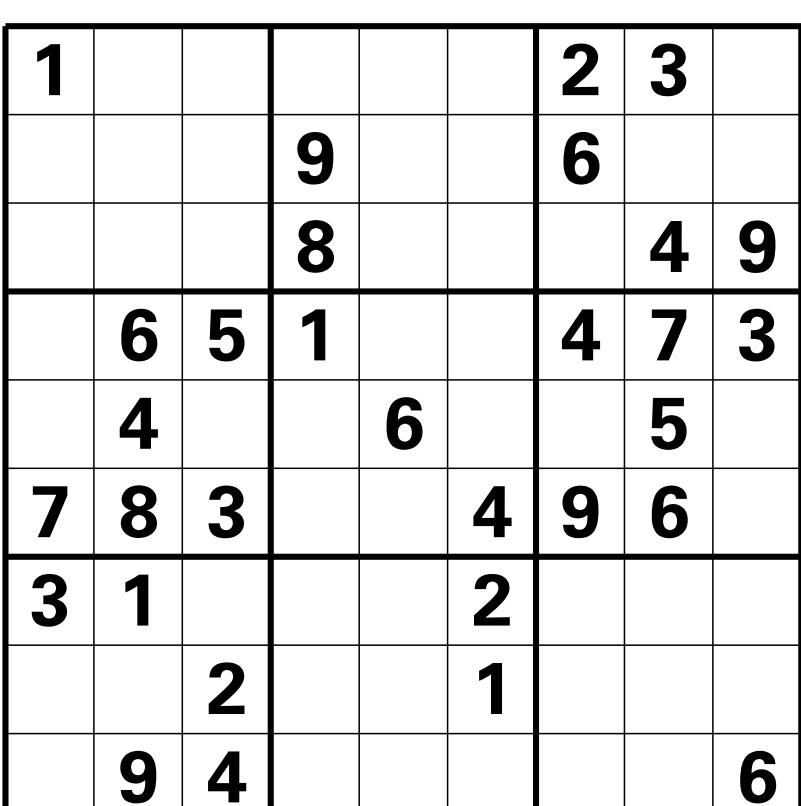
by Jorge Cham



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Sudoku

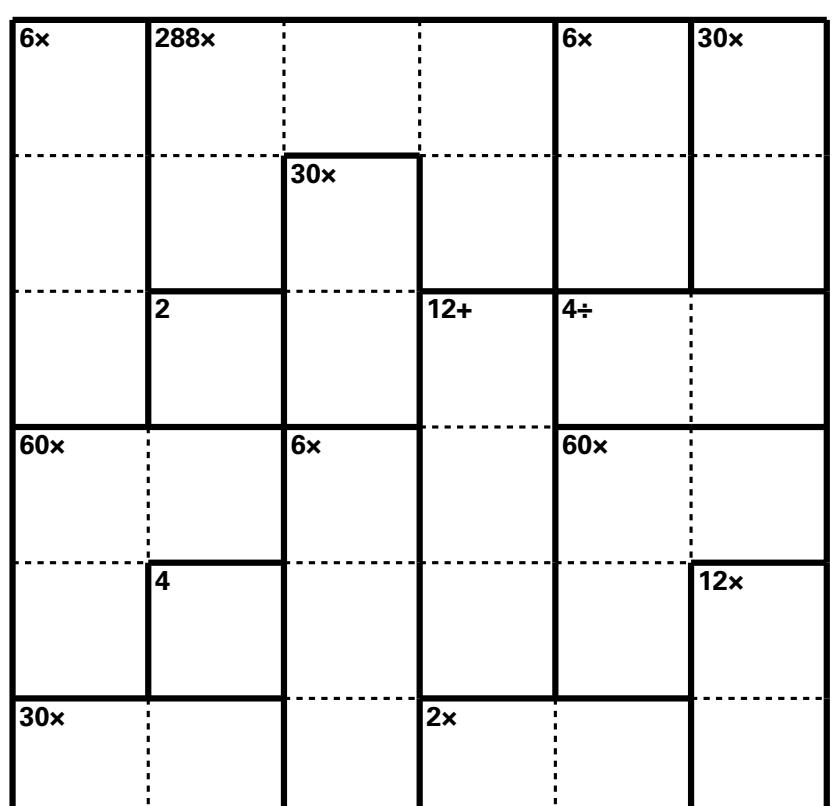
Solution, page 15



Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Techdoku

Solution, page 15



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

The MIT Bitcoin Club presents:

WHAT IS BITCOIN?

AND WHY SHOULD I CARE?

Featuring:

Jeremy Allaire

Founder and CEO,
Circle Internet Financial



**TUESDAY,
FEBRUARY 11th**

MacLaurin (4-370)

6:30pm Food and Discussion

7:00pm Presentation and Q&A

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The MIT Bitcoin Club Online:

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REGISTER AT:

Bitcoin101.eventbrite.com

Turkish Cultural Night

February 9, Sunday
8 PM- 10:30 PM
Walker Memorial
(50-140)

Turkish Student Association would like to give you a firsthand experience of the Turkish culture. There will be real Turkish food, music, and dancing! Boston Meyhanesi will be performing.

This event is FREE for MIT students, and \$10 for others. RSVP is required for all.

Please RSVP at goo.gl/IApDSR or find MIT Turkish Student Association on facebook for more information.

sponsored by ARCADE



MOVIE REVIEW

That inappropriate, mildly amusing moment

Leave Zac Efron at home next time

NICOLE RIVELLI

Miles Teller, Michael B. Jordan and Zac Efron in the romantic comedy *That Awkward Moment*.

By Chennah Heroor
ARTS EDITOR

What do you get when you make a rom-com about three good-looking twenty-something guys in New York City? Lots of raunchy jokes and romantic clichés.

That Awkward Moment focuses on Jason (Zac Efron), Mikey (Michael B. Jordan), and Daniel (Miles Teller). Jason and Daniel work together as book cover designers, while Mikey (apparently the only one who lives in the real world) is a doctor. Mikey's wife cheats on him and dumps him, prompting Jason and Daniel to swear a pact to stay single in solidarity with Mikey.

Of course, their pact is quickly complicated by a trio of bland women who become their girlfriends, in all but name. And that's

when the real problems begin.

While this movie markets itself as a romantic comedy, it's really a buddy movie that happens to include dating. None of the women in the movie have any personality whatsoever. Rather, they are plot points used to teach the men in the story about themselves.

Every girlfriend in the movie fits a stereotype, from maniac-pixie dream girl to girl-next-door to regretful, cheating wife. Predictably, neither Jason, Mikey, nor Daniel had any chemistry with the female leads at all. It's hard to fall in love with a paper-thin character after all. Instead they resort to tired clichés to emote how important their girlfriend is to their lives. And at the end, when Jason has to make a big romantic gesture to win back the girl he lost, he resorts to a retread of a monologue he used earlier in the story. The first

time, it was silly. The second time, it was absolutely stupid, but he still got the girl.

The real stars of this movie are Michael B. Jordan and Miles Teller. Both have an easy charm and talent that they bring to their roles — Teller is loose and jokey, while Jordan slips into the role of a wounded, sweet man. Meanwhile, Zac Efron plays only a single emotion — uninterested. It's an appropriate choice for the first half of the movie when Jason plays a womanizer, but it's irritating when Efron retains that barely concealed smirk during the final act.

Obviously, the movie works well whenever Jason, Mikey, and Daniel are hanging out together. Of course, there are plenty of suggestive jokes and gags, which are actually pretty funny. Jordan and Teller pick up the slack for the inattentive Efron and make their

★★★★★

That Awkward Moment

Directed by Tom Gormison

Starring Zac Efron, Michael B. Jordan, Miles Teller

Rated R

Now Playing

trio seem like a fun group of friends. But everything in between is just a drag.

RESTAURANT REVIEW

Affordable, delicious, and all-you-can-eat

Shalimar of India offers a lunch buffet close to campus

By Tara Lee

For many, IAP is a time to learn the invaluable life skill of cooking. But IAP is also a great time to explore the restaurants that

Cambridge has to offer, especially those near campus. A brief walk down Massachusetts Avenue yields Shalimar of India, a mid-size restaurant in Central Square.

The atmosphere at Shalimar engages all the senses, with traditional Indian music booming in the background, works of Indian art upon the walls, and the inviting aroma of the lunch buffet up front. I sampled Shalimar's all-you-can-eat lunch buffet, offered daily from 11am-3pm at the remarkable price of \$8.95, including about 15 options to choose from.

With a wonderful consistency and neutral flavor, the naan (flatbread) pairs well with the various curries and spices at the buffet. I first tried it along with the chicken tikka masala, a classic tomato curry dish. This version of the tikka masala has a noticeably strong tomato flavor, however, and it almost tastes like

a thick, tomato soup because it is not spicy at all. Nevertheless, the flavor of the dish is exceptionally bold, and it also balances well with the jasmine white rice.

The beef vindaloo, on the other hand, is so spicy that the spiciness practically overwhelms the flavor of the dish. I usually do not mind spicy foods, but this beef dish took me aback because I tried it right after the mild tikka masala. In terms of temperature, the vindaloo was also significantly hotter than the tikka masala, so I would have appreciated a more consistent level for both temperature and spiciness. The beef was tangy and had a strong flavor that again pairs well with the neutral rice and naan.

Lastly, I sampled the chole, a vegetarian chickpea dish. I generally find chickpeas to be quite bland alone, but the dish included enough unique spices to create a savory

546 Massachusetts Avenue, Cambridge

Mon-Thurs: 11:30 a.m.-10:30 p.m.

Fri & Sat: 11:30 a.m.-11:00 p.m.

Sunday: 11:30 a.m.-10:30 p.m.

flavor.

With bold flavors and a wide variety of options, I was pleased with Shalimar. The extremely reasonable lunch buffet price will certainly bring me back to this Indian restaurant again soon.

CONCERT REVIEW

Panic! at the hip rolls

X Ambassadors open for Panic! at the Disco

By Rachel Katz
STAFF WRITER

Opening for Panic! at the Disco is a daunting task. Fans trickled into the venue after braving the biting Boston chill while waiting in a line that, quite literally, wrapped around the block. It's hard to please an overly excited, impatient group of people who are here for the main act and would likely be content to skip your performance entirely.

That being said, X Ambassadors' performance was all the more impressive. The alternative group, whose sound seems influenced by pop punk and a bit of soul and style screams 'Brooklyn Indie Rock,' filled the House of Blues with quality music from the start of the night. The band was full of multi-talented musicians, Adam Levin giving an outstanding performance on drums, with Sam Harris, the lead vocalist, supporting percussion and occasionally picking up a saxophone, while his brother Casey

Harris played keyboard and guitarist Noah Feldshuh supported vocals.

The band had a lengthy set list for an opening act, but no onlookers seemed bored. A single song in, and the audience was head-bobbing along to the bass-heavy beat. A few songs later, the woman standing next to me turned to proclaim that the music was "so [expletive] sick!" Each band member easily held his own onstage. While Feldshuh and Levin pulled intense facial expressions, Casey Harris let the music move through his body to the ends of his arms, one of which was always raised above his head between chords. Their enthusiasm spread easily to the audience. Sam Harris's dance moves were later described by Panic!s Brendon Urie as "Usher Raymond-like." The long hip rolls that the lead vocalist pulled out during the chorus of the title song of X Ambassadors' first EP, Love Songs, Drug Songs, created a panic of their own.

After the show was over, a sizable horde



COURTESY OF INTERSCOPE RECORDS

The Brooklyn-based quartet X Ambassadors opened for Panic! at The Disco last Thursday at Boston's House of Blues.

of fans, male and female alike (though decidedly erring more toward female), crowded around Sam Harris for pictures, hugs, and autographs on their newly purchased albums and t-shirts. The group's career may be in its beginnings, but it certainly isn't nearing its end. It goes without saying—X Ambassadors know how to perform.

★★★★★

House of Blues

Jan. 30, 2014

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Cynthia Barnhart named chancellor

Course 1 professor is the first woman to serve in the role at MIT

Barnhart, from Page 1

She called the "culture of student self-governance" at MIT "really important," adding that "anything, I think, that we do here has to include students, has to include a grassroots effort with the students."

Barnhart also said that MIT has a strong "culture of experimentation and risk-taking," but added that there would have to be limits to a freewheeling atmosphere. "While there is this culture of experimentation, there has to be boundaries," she said, calling for "dialogue for general understanding and agreement about where those boundaries are."

"One thing that I have heard is that there are students that have been silenced to some extent, and I think it's important that we hear all the voices," she said. "We have an obligation to provide a safe environment for all the students."

Among her concerns was sexual assault. "There's unfortunately a culture — I don't know if it's a culture, or maybe it's best said the way Obama said it, a real issue or even epidemic — around sexual assault," Barnhart said, calling the problem "a serious challenge that I would love to do something about."

Reports of sexual assault are on the rise on Boston-area campuses, according to the *Boston Globe*. Two weeks ago, President Barack Obama

charged a task force with finding out what colleges are doing — and what they should be doing — to confront sexual assaults.

Barnhart is a professor in the Department of Civil and Environmental Engineering. As associate dean of the School of Engineering since 2007, she has been involved with strategic planning, budgets, hiring, and promotions in the School, according to an MIT press release. She is also the director of Transportation@MIT, an initiative that seeks to address the world's transportation needs. President Reif appointed her as chancellor after consulting faculty, staff, and students, according to the press release, and the decision was endorsed by the Executive Committee of the MIT Corporation.

As a professor at MIT for over 20 years, Barnhart has also had a significant amount of interaction with students, having served as an undergraduate advisor since 1992 and supervised 83 theses, according to the press release.

But Barnhart said she looks forward to making students and student life her new focus, though she also said she had a lot to learn.

"I love the way people your age think," she said to two undergraduate Tech reporters. "It's so refreshing to me, and it kind of invigorates me."

Bruno B.F. Faviero contributed reporting.

MASLAB Competition



RACHEL E. AVILES—THE TECH

MASLAB, Mobile Autonomous Systems Labortory, an annual IAP robotics competition, held its final last Friday, Jan. 31st. Teams were challenged to design and program autonomous robots tasked with navigating and completing tasks on a map simulating a Nuclear energy facility.

Know something important we should write about?

(We probably don't know about it.)

Let us know.

news@tech.mit.edu

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Epsilon Theta Spring 2014 Rush Schedule

Meet us at the chapel turnaround (across Maseeh) at the listed time. Look for the yellow sign! Vegan options available at every meal!

Friday 2/7

- 5:15 PM **Tacos!** Stuff tacos to your heart's desire.
- 7:00 PM **Food Tongue 101.** Pear wonton peach sauce food tongue?
- 9:00 PM **LAN Party.** Warcraft 3, Starcraft 2. Natural Selection 2. Age of Empires 2, League of Legends. You name it!

Saturday 2/8

- 12:15 PM **Lunch!** Join us for a tasty home-cooked meal by our cook Karen.
- 1:30 PM **Anime Marathon.** Join us for an Anime Marathon of Eden of the East!
- 5:15 PM **Dinner!** More food by Karen. Yum!
- 7:00 PM **Programming Competition.** Write an AI to compete in a short game of our design.
- 9:00 PM **Laser Maze.** Homemade laser security system, Nerf gun guards, puzzles, what else could budding spies want?

Sunday 2/9

- 12:15 PM **Lunch.** Karen is the best. She makes us tasty food. Join us in eating said food.
- 1:30 PM **Python Bee.** "Now was that three spaces or four? Darn. Let's start over."
- 3:30 PM **Manhunt.** How quickly the tables turn and the prey becomes the predator. Rock paper scissors tag---tag the last of your prey at your own risk! Join us on campus at Lobby 7!
- 5:15 PM **Make Your Own Pizza!** Try your hand at crafting a delicious pizza.
- 7:00 PM **Scary Games By Committee.** Play scary games! Watch other people play scary games! AAAAAAAA!
- 9:00 PM **Charades Variants.** Impossible charades, telephone charades, contact charades, blindfolded charades, ALL OF THE ABOVE AT ONCE.

This space donated by The Tech

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Feb. 1-14

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Prosecutors: bomb suspect remorseless

Holder clears way for DOJ to seek death penalty for alleged bomber

Death penalty, from Page 1

death penalty. Just three defendants have been executed under the federal death penalty since 1988.

In capital punishment cases, prosecutors are required to announce from the outset whether they will seek the death penalty, and US District Court George A. O'Toole Jr. had given prosecutors until Friday to decide, calling it a "significant event in the life of the case."

With the authorization, the US attorney's office can now request a trial date. The threat of a death sentence can also now be a factor in any plea negotiations.

Tsarnaev's defense team may also consider whether to ask the judge to relocate the trial to a different

district, either in state or out of state.

Tsarnaev, now 20, faces 30 charges in a federal indictment in connection with the bombing that plunged the region into terror for five days, until his swarrest after a police chase and firefight in Watertown. Tamerlan Tsarnaev was killed during the confrontation in Watertown.

Krystle Campbell, 29; Lingzi Lu, 23; and Martin Richard, 8, died in the blasts. Dzhokhar Tsarnaev also faces charges in the fatal shooting of MIT police Officer Sean Collier.

Of the 30 counts Tsarnaev faces, prosecutors say they will justify the death sentence for 17 of them by proving several necessary factors,

Death penalty, Page 16

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Martin Schmidt named MIT provost

Electrical engineering professor has been at the Institute since 1981

Provost, from Page 1

address.

Finding dedicated space for these initiatives will be a task that MIT will have to think about in the context of the MIT 2030 framework for revamping the campus, Schmidt said.

One example is the possibility of "maker spaces," which he said the current campus would be "challenged to support." But these spaces, hoped to feature shop tools and 3D printers, have garnered "explosive interest" and are seen as potentially part of the Innovation Initiative.

As provost, Schmidt, together with the executive vice president and vice president for finance, will also oversee ongoing renovation and construction.

Schmidt said that an accreditor once told him that despite MIT's status as a world-class institution, "frankly your physical campus doesn't look like it."

Remarks like that underscore the importance of the campus's renewal for Schmidt, who said he sees the stewardship of MIT's resources and shaping MIT's priorities as some of his biggest challenges ahead.

While MIT's east campus "gate-

way" project has drawn much attention, Schmidt said he is also excited about changes closer to the core of MIT's campus. With Building 12 set to be replaced by a new nanotechnology facility and Building 2 undergoing major renovations, Schmidt said "it's going to be really exciting to see these buildings around us look nice and be effective for what we want to do."

Schmidt, a professor of electrical engineering, has been at the Institute since 1981 when he started as a graduate student, according to an MIT press release. After earning his SM and PhD, Schmidt went on to become a professor, play a role in the founding of six companies, and head MIT's Microsystems Technology Laboratories from 1999 to 2006. As associate provost beginning in 2008, Schmidt has been involved with the Institute-Wide Planning Task Force, formed in response to the financial crisis, and the plans for east campus and Kendall Square.

After consulting faculty members and students, Reif selected Schmidt to be provost, with the endorsement of the Executive Committee of the MIT Corporation, according to the press release.

A random sampling of people you'll meet during a typical dinner at The Tech:

Derek, Course 1	Austin, Course 8	Chris, Course 16
Sarah, Course 2	Ian, Course 9	Anne, Course 17
Annia, Course 3	Joyce, Course 10	Leon, Course 18
Dohyun, Course 4	Sara, Course 11	Jack, Course 19
Will, Course 5	Vince, Course 12	Stan, Course 20
Deborah, Course 6	Anthony, Course 14	Stephen, 21/CMS
Kali, Course 7	Maggie, Course 15	Keith, Course 22

Meet your new pset support group



Solution to Sudoku from page 6

1	5	9	4	7	6	2	3	8
4	3	8	9	2	5	6	1	7
6	2	7	8	1	3	5	4	9
2	6	5	1	8	9	4	7	3
9	4	1	3	6	7	8	5	2
7	8	3	2	5	4	9	6	1
3	1	6	5	9	2	7	8	4
8	7	2	6	4	1	3	9	5
5	9	4	7	3	8	1	2	6

Solution to Techdoku from page 6

1	6	4	3	2	5
2	1	5	4	3	6
3	2	6	5	4	1
4	3	1	6	5	2
5	4	2	1	6	3
6	5	3	2	1	4

Solution to Crossword from page 5

CAMP	KHAKI	IVAN
OMAR	IOWAN	LIME
ABLE	NEARS	LIMO
XII	ANGRY	MEN
MID	ATEAM	
EXPLOIT	SANE	EST
MTV	EMCEE	TONER
OHIO	END	NONE
SACKS	SAGAS	USE
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Hans Op de Beeck: Staging Silence (2)

List Projects: Kambui Olujimi

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Artist's Talk: Hans Op de Beeck – 6PM

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Holder clears way for death penalty

Death penalty, from Page 14

including that the killings and injuries were intentional, that Tsarnaev willingly took part in the acts that resulted in death, and that he knew they could end in death.

In the document notifying the courts they would seek the death penalty, prosecutors also cited several arguments that they were not required to make by law, including Tsarnaev's selection of the Marathon as the site of the bombings.

Tsarnaev, who was born in Kyrgyzstan and later became a US citizen, "enjoyed the freedoms of a United States citizen [then] betrayed his allegiance to the United States by killing and maiming people in the United States," prosecutors said.

If he is convicted, prosecutors would have to argue for the death penalty before a jury in a separate sentencing trial. Assistant US Attorney William D. Weinreb said in a previous hearing that a trial could last three months and that the sentencing trial could last an additional two months.

Holder's decision means that the federal court system in Massachusetts will have two pending death penalty cases. The US is also seeking capital punishment for Gary Lee Sampson, an admitted serial killer.

A federal jury agreed to issue the death sentence for Sampson in 2003, but a federal judge vacated that decision in 2011, after finding that one of the jurors withheld information. Prosecutors are seeking the death penalty in a new trial.

Since federal death penalty laws were first enacted in 1988, federal prosecutors have sought the death penalty two other times in Massachusetts.

In the case of two Dorchester gang members a decade ago, the prosecutors ultimately dropped the charges, and the men were tried in state court. For Kirsten Gilbert, a former nurse who was convicted in 2001 of administering lethal injections to patients, a jury chose a life sentence, rather than the death penalty.

Since 1988, the US attorney general has authorized the death penalty for 492 defendants.

Opponents of the death penalty — the Boston Bar Association declared its opposition to capital punishment earlier this month — assert that it provides an "illusion of ultimate punishment." Holder has previously said that he personally opposes capital punishment.

A Globe poll in September showed that 57 percent of Massachusetts respondents supported a life sentence for Tsarnaev, compared with 33 percent who favored the death penalty.

David P. Hoose, a Northhampton-based lawyer who handles death penalty cases, said that while the federal government has authorized fewer capital cases in recent years, he expected it would seek the death penalty in Tsarnaev's case, noting the overall nature of the terrorist attack.

"If they ever want to maintain any credibility that there is a federal death penalty and they're going to use it, of course, they're going to authorize it in this case," he said. "They're not ready to declare a de facto moratorium on the death penalty."

Gaggle cops 134th Mananging Board elections

By **Vladimir P. Utin**
STAFF REPORTER

Some have said that if one were to count total number of medals won by The Tech's Managing Board in the Winter Olympics up to now, it would be the equivalent of a small tropical country that had never seen snow before in their lives.

But that all changes with the upcoming Winter Olympics, where many of our talented V134 Managing Board members will be taking on the task of earning as many medals as the Bahamas. Incoming **Managing Editor Judy Hsiang '12** persuaded the Olympic officials to allow The Tech to bypass the qualification process. Some may question her methods, but Judy always swears by arm wrestling and her "Iron Fist."

Through extensive marketing, incumbent **Business Manager Joyce Zhang '16** has earned The Tech enough money to sponsor our esteemed athletes. When asked if the athletes could fly first class to Sochi, Joyce commented, "Honey, be glad that we still have prodmunchies."

Finding the challenge of any single event insufficient, **Chairman**

Annia Pan '15 invented a new combination sport to premier at these winter games, skelugeton. Skelugeton incorporates the dangers of luge and extremes of skeleton into one fast-paced, death-defying race.

Editor In Chief Austin Hess '15 has been charged with the daunting task of bringing honor to The Tech's Ice Hockey Team. Although he will face insurmountable odds as one scrawny college student against six highly trained, highly muscled, and very angry professional hockey players, Hess is confident he can talk the other teams into submission. We'll offer more coverage on that as the situation develops.

Rising stars in the sport of snowboarding, newly elected **Production Editors, Esme Rhine '15** and **Will Conway '16** credit their athleticism "to hours not spent on the ripstik." At the time of the interview, incumbent production editor **Anthony Yu '16** was still attempting to master this elusive skill and was unable to comment.

One wouldn't exactly say that the newly elected **Arts Editors, Chennah Heroor '15** and **Denis Bozic '15**, are the favorites for Gold in Figure Skating, but their vast experience in critiquing ballet per-

formances has prepared them for whatever commentary the judges have in store. Whatever the outcome, they probably plan to review themselves anyway.

Also, look out for **Opinion Editor Jacob London '15**, who plans to wow the judges in Ice Dancing with balterting moves.

In preparation for the upcoming games, incoming **News Editors** have turned their weekly meetings into curling sessions. **Kath Xu '16** and **Tushar Kamath '16** have perfected their sweeping motion by cleaning the office, and **Leon Lin '16** has trained for the skip position by emitting the occasional and startling "huhWHAT?"

The sole Tech representative for short track speed skating, **Online Media Editor Stephen Suen '15** picked the sport because he was "drawn to the form fitting uniforms."

Although the danger is great, **Photography Editors** have committed to entering the ski jump to bring glory to the student group. "Yeah I've never skied before, and sure, it's really terrifying, but think of the great shot I'll be able to get from the peak of the jump!" says **Tami Forrester '15**. **Chris Maynor '15** maintains that he will be able to face the slopes without any courage enhancing liquids.

Campus Life Editor Kali Xu '15 was devastated to hear that her ski ballet exhibition had been canceled. She was rumored to be the savior of the sport, which will have to wait another 4 years before it may appear at the Olympics again.

At press time, the Tech's business department was deep in research as to how much any medals won would earn if sold on the internet. **Operations Manager, Maria Fabre '16**, is confident that profits will be enough to purchase one-eighth of a dogecoin. **Advertising Manager, Nayeon Kim '16**, has also entered talks with Sillybandz for endorsement by the Tech's illustrious athletes.

Sports Editors Ali C. Soylemezoglu '17 and **Austin Osbourne '15** don't plan on entering any Olympic events because of extensive leg injuries sustained while playing real, 'Merican sports.

Senior Editors Anne Cai '14, Deborah Chen '14, Bruno B. F. Faviero '15, Sarah Ritter '14 and **Jessica L. Wass '14** plan on becoming the dream team as they bobsled to victory, recognizing the appeal of

a sport that allows them to do all the work early on and then coast the rest of the way.

All results will be posted by on an Olympic Website, which **Technology Director Greg Steinbrecher G** estimates will be up by February 2018.

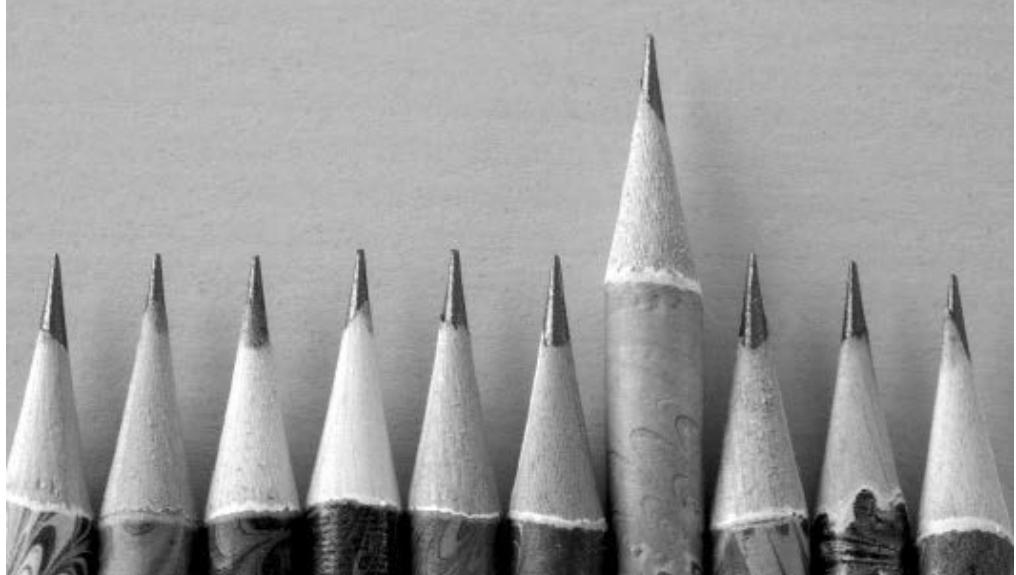
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Congratulations!

2014 Burchard Scholars

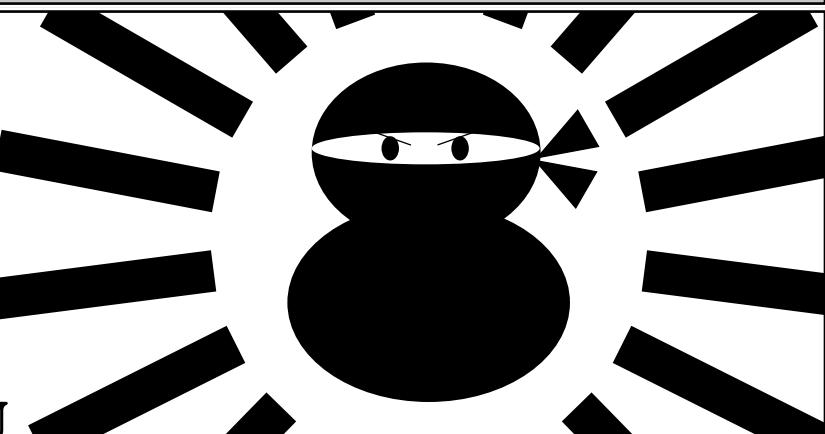
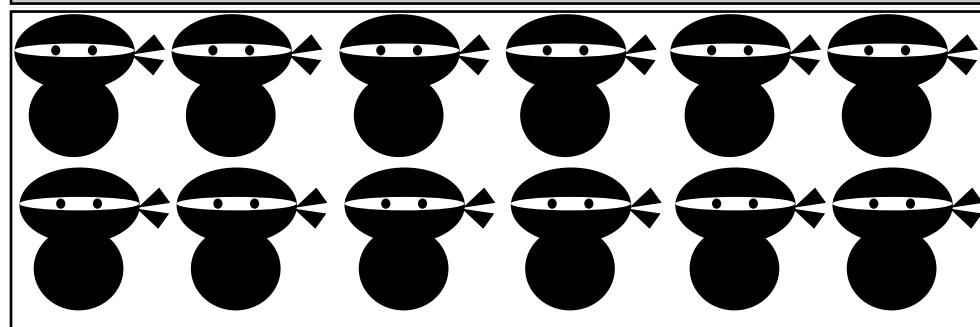
Elizabeth Berg	Royal Morris
Halide Bey	Olivia Murton
Kathryn Buggs	Alyssa Napier
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Marisa Fryer	Caitlin Tan
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STRANGER THAN FICTION

Don't get caught in a web of time sinks

Tips on how to succeed in the 6.470 IAP web programming competition

By Deena Wang
ASSOCIATE CAMPUS LIFE EDITOR

The well-rounded students use IAP for vacation, avoiding the winter weather in California, or embracing the winter weather in Maine. The inquisitive use IAP to take classes in interesting subjects, such as Medieval cooking, or Japanese flower arranging. And the masochistic decide to spend IAP slaving away on 6.470, MIT's web programming competition.

I was in the latter camp, and I spent almost 100 hours (yes, I kept track) working on Streetfarer, a website that helps you explore your city by generating a random walking path that passes by locations that might interest you.

Although I did sacrifice my last IAP to 6.470, I only regret not competing sooner. Deploying an app teaches you aspects of real-world software development that problem sets do not, such as how to handle frustration in development environment configuration. As a graduating senior, I will not have the opportunity to compete again, but I wanted to pass on some advice for next year's contestants.

Developer time is your most important resource. You only have three weeks to make as good a product as you can.

Even before the competition starts, you can start preparing your development environment. It is worth spending time in the beginning improving your efficiency so that you can write code without roadblocks later. I only really started looking into the technologies we needed to make the website when the competition started, which might have been too late. It took me a week to install the postgres database, hook it up to Django, and deploy it to Heroku (although I lost two days because I messed up the kernels in my Debian laptop and had to re-install my OS). That week of time could have been used to work on

the site.

Another way to save time is to make sure everyone on the team is developing in the same environment. The designer on our team had difficulty installing postgres on her Mac, and consequently, she developed the front end in a separate file than the real web app. Manually integrating her front end design into the Django templates was tedious, error-prone, and inefficient.

Using frameworks and external APIs are good ways to get a site running quickly. Instead of writing our own algorithms, we used Google's APIs to both select locations and generate paths. Although the paths they generated had some problems, such as being of unpredictable length, it was not feasible to create our own path algorithm when we had so many other aspects to work on.

UI is the most important aspect of your website. Forget your fancy algorithms and secure login systems. The only aspect of your website that users and even judges will see is the front end. If you have the "wow" factor, such as the team which created a 3D model of energy use in the city, then that's most of the points right there. It might be worth recruiting a member of your team who specializes in design.

UI is the most important aspect of your website. Forget your fancy algorithms.

In my experience, the front end was more difficult than the back end. Once you pick a backend framework, the steps you need to take to use it are straightforward. Install the database, create some models of the data, hook up some URLs — all the instructions were available online. The

front end was more confusing because there were a lot more feasible options. You could create your own interface with HTML/CSS/Javascript, or you could use any number of frameworks such as Angular.js or Backbone.js. We ended up using a mix of Angular, Backbone, and custom CSS to style our website, which was probably not the optimal choice.

quickly, and we were committed to implementing that idea.

Not all of our decisions were that straightforward. I thought it was a good idea to come to some sort of standard regarding how CSS classes should be named. There were two viable options: using underscores to separate words or using -dashes-. The designer was accustomed to

Everyone should know what technologies the site is using and what each person is working on. We held meetings about every other day.

Communication. Everyone should know what technologies the site is using, and what each person is working on. We held meetings about every other day, which helped orient us about what to work on.

Code should also be communicative. Beyond comments, the version control system Git allows code to be shared among each person in the group. Committing early, often, and to completion allows each member to see what the others have been working on. Plus, it's good practice for collaborative development.

Unfortunately, there was an incident at the end of the competition in which poor communication led to wasted work. Two members of our team were working on a different version of the website interface than the designer. Since these were parallel versions of the site, only one interface could be used, so one version of the site would inevitably be wasted.

Decisions must be made firmly, unilaterally, and quickly. There isn't enough time to make a whole bunch of mockups or to test a bunch of concepts. In the very beginning, we brainstormed website ideas for each of the themes of the competition, but we decided on our final idea very

using underscores and I had a slight preference for dashes, but I couldn't think of a justification for dashes. At that time, we decided on underscores. Later on, I realized that the CSS classes in Bootstrap all used dashes, and suggested we change our standard to dashes.

Big mistake. Trying to change all incidences of underscores to dashes introduced a lot of user interface bugs, and our designer spent a day trying to fix it. We eventually abandoned the standardization attempt. If we were planning on making a long-term, maintainable website, it would have been important to make our name schemes consistent, but for this site, it wasn't important.

Be ambitious. Our team of a 6-3 freshman, a 6-7 senior, and a course 4 master's student could have applied for the rookie division, and that was our initial intention. But there were more prizes available for the main division, and we were told that there were fewer teams competing in the main division, so we decided to switch. And what do you know? We won 1st tier honorable mention, for 1,000 dollars. If we had competed in the Rookie division, we would have needed to win 2nd place to get the same amount of money.



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EVENTS

FEB. 4 – FEB. 10

TUESDAY

(12:00 p.m. – 3:00 p.m.) Community Service Fair, hosted by the MIT Public Service Center — Lobby 10

(7:00 p.m. – 9:00 p.m.) Getting Beyond Us and Them: Our Brains and the Possibility of Peace — 6-120

WEDNESDAY

(11:00 a.m. – 12:30) MIT Police laptop tagging and registration, \$10 in cash or MIT cost object — Stata

(9:00 – 10:00 p.m.) Mexican Coffee Hour with taco bar and dessert — Sidney Pacific MP Room

THURSDAY

(2:00 p.m. – 3:00 p.m.) Writing compelling cover letters. Sponsored by MIT Global Education & Career Development — 5-217

(6:00 p.m. – 8:15 p.m.) Free yoga session with "how to sleep well" discussion followed by food, sponsored by Yoga24x7 — 56-180

FRIDAY

(7:00 p.m. – 9:00 p.m.) LSC shows Miss Congeniality, free tickets in Lobby 16 — 26-100

(8:00 p.m. – 10:30 p.m.) Musical Theatre Guild presents Little Shop of Horrors — La Sala de Puerto Rico

SATURDAY

(7:00 p.m. – 10:00 p.m.) Sublime Melodies Monad Trio Concert, \$10 for MIT undergrads and \$20 general public, sponsored by Persian Students Association and ASA — E51

(7:00 p.m. – 10:00 p.m.) Chinese New Year's Celebration, \$3 at booth and \$6 at the door, sponsored by Malaysian Student Association — W20-491

SUNDAY

(8:00 p.m. – 10:30 p.m.) Turkish Cultural Night, free for MIT students and \$10 for others, sponsored by Turkish Student Association and ARCADE — 50-140

MONDAY

(4:00 p.m. – 5:30 p.m.) Intergenerational Mobility Across Three Generations in the 19th Century: Evidence from the US Census, sponsored by Microeconomic Applications — E62-650

(5:30 p.m. – 7:00 p.m.) Falling Short of Expectations? Stress-Testing the European Banking System, sponsored by the Applied Theory Workshop — E19-758

Send your campus events to events@tech.mit.edu.

INNOVATION NATION

Operation: LGO Plant Trek

Exploring advanced-manufacturing and operations companies across the country

By Sara Dolcetti

7 cities, 2 weeks, 1 mission: to explore the inner-workings of leading advanced-manufacturing and operations companies.

And trek we did. This IAP, our Leaders of Global Operations (LGO) Class of 2015 visited seven partner companies across the United States, from Detroit to LA to Puerto Rico.

It started rather unconventionally, when upon discovering that our flight to Detroit had been cancelled due to a severe winter storm, we decided to battle the weather ourselves and drive there... in fleets of minivans! Driving through the night through fog and heavy snow, many LGO'ers made it in time to tour GM's facilities. Persistence, ingenuity and hard work: all facets of the LGO spirit!

The trek is a flagship of the LGO program, where students, averaging five years of work experience from start-ups to multinationals, pursue two Masters Degrees in two years: one from the MIT School of Engineering (MS) and one from the MIT Sloan School of Management (MBA).

In short, the trek was a phenomenal experience. We toured companies and spoke with senior leaders across a broad spectrum of industries, geographies, and growth stages. We discussed corporate strategy and personal reflections with business magnates Michael Dell (Chairman of the Board and CEO at Dell) and Jeff Wilke

(SVP of Consumer Business at Amazon). On a personal note, Dell was surprised that his record as the youngest Fortune 500 CEO had not yet been surpassed — even by Mark Zuckerberg!

We also gained perspective on leadership excellence in the non-profit sector. In Oregon, we met with two Rodel Fellows: former State Treasurer Randall Edwards and the state's youngest State Senator, Chris Edwards. Irrespective of sector, common traits these leaders exuded were focus, dedication, and ingenuity in finding creative solutions to tough problems. This was best displayed by Michael Dell's leadership in re-privatizing the company and moving it from being product-focused to service-focused.

That said, the sine qua non of the annual LGO plant trek is the assessment we provide to, and discuss with, each company. Personally, I found it fulfilling to see how quickly my peers and I were able to dissect each plant, largely due to the practical training we received through LGO. Eugene Goodson wrote, "to a trained eye... a plant tour can reveal a lot about a company". By walking the plant lines, talking with employees, and debriefing each company with LGO program director Don Rosenfield and international Total Quality Management (TQM) expert Shoji Shiba, I realized just how much LGO has opened my eyes.

In our workshops, we learned about process flow methods, and during the trek,



Doug Drauch, employee of General Motors, gives Leaders of Global Operations students a tour of the General Motors facilities during IAP.

saw Boeing use a pulsed continuous moving line to manufacture the 737s. In our labs, we learned about lean tools, and during the trek, observed GM's use of kitting to assemble vehicles such as the Chevy Volt. In our classes, we had engaging case discussions on the importance of keeping corporate and manufacturing strategies aligned, and dur-

ing the trek, saw how Nike is keeping both in-sync through dramatic changes in their global supply chain.

In summary, the LGO Plant Trek was an unparalleled opportunity to explore world-class advanced-manufacturing and operations companies under the guidance of MIT's leading experts.

This **CSAIL SEMINAR SERIES**, organized in cooperation with the Siri team at Apple, invites leading researchers in HLT to give lectures that introduce the fundamentals of spoken language systems, assess the current state of the art, outline challenges, and speculate on how they can be met. Lectures occur 2-3 times per semester and should be accessible to undergraduates with some technical background.

Human Language Technology

DISTINGUISHED LECTURE SERIES

Spoken Term Detection — A Loss for Words

WEDNESDAY,
FEBRUARY 5TH 2014

4:30 to 5:30 PM

Refreshments at 4:15 PM

Building 32-123, 32 Vassar Street, Cambridge, Massachusetts

ABSTRACT: As speech recognition continues to improve, new applications of the technology have been enabled. It is now common to search for information and send accurate short messages by speaking into a cellphone - something completely impractical just a few years ago. Another application that has recently been gaining attention is "Spoken Term Detection" - using speech recognition technology to locate key words or phrases of interest in running speech of variable quality. Spoken Term Detection can be used to issue real time alerts, rapidly identify multimedia clips of interesting content, and, when combined with search technology, even provide real-time commentary during broadcasts and meetings. This talk will describe the basics of Spoken Term Detection systems, including recent advances in core speech recognition technology, performance metrics, how out-of-vocabulary queries are handled, and ways of using score normalization and system combination to dramatically improve system performance.



SPEAKER:
MICHAEL PICHENY
IBM TJ WATSON RESEARCH CENTER

HOSTS:
JIM GLASS and VICTOR ZUE
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CAMPUS LIFE CAMPUS LIFE CAMPUS

Champions League soccer returns in February

All eyes will be on Manchester City vs. Barcelona as two giants battle it out in Last 16

By Ali Soylemezoglu
SPORTS EDITOR

After a long winter break, Champions League soccer is set to return on February 18. The group stage has concluded and 16 teams have been eliminated, leaving the last 16 teams in the race for Europe's top trophy. The remaining teams include the usual suspects like Real Madrid and Barcelona, as well as a couple of upsets such as Galatasaray, who beat Juventus in a dramatic match in the last round of the group stages to see them through to the next round, and Olympiacos. With that said, let's take a look at the first four of the Last 16 matchups.

Manchester City vs. Barcelona

Arguably the toughest draw of this round, English powerhouse Manchester City will be facing off against Spanish giants Barcelona. Barcelona finished their group first with 13 points while City finished second in their own group with 15 points. It is important to note that City tied its group's first place team, Bayern Munich, but finished second since Bayern had the better head to head record. Manchester City have turned into goal scoring machines under the guidance of their manager, Manuel Pellegrini. They have scored 18 goals and conceded 10 in the Champions League group stage. Not only do they score goals, but they get the wins they want. City have terrific form in all their competitions, as they are in a heated race for Premier League Championship and have only one loss in the Champions League.

Barcelona has scored 16 and conceded 5 goals in the Champions

League group stage. They still have great form, but they've suffered a surprising recent loss to Valencia in their home stadium. Their manager, Gerard Martino, has voiced his concern regarding this loss, and his squad will be looking to get back to winning form before facing off against a strong Manchester City side. Furthermore, Martino's team had to cope with injuries throughout the first half the season with Messi recently returning from injury to resume his goal scoring form. But they have now lost Neymar to an ankle injury, and he won't be playing in any upcoming matches. In fact, his return might be the first leg of the Manchester City matchup. Any delays on his return could hurt Barcelona in the first leg of this draw.

This tough matchup will be difficult to call. Barcelona, however, have failed to perform when they faced pressure on their own side of the field, as seen in the recent Atletico Madrid match in La Liga. If Manchester City could bring that pressure to Barcelona, then City might be closer to the quarterfinals and Barcelona would be out early. No matter how it goes, the two legs will provide delightful games for fans all around the world.

Arsenal vs. Bayern Munich

If Manchester City against Barcelona is not the toughest draw, then this one surely is. Arsenal are having a phenomenal season, having managed to actually carry on their title challenge throughout the season. They are constantly changing places with Manchester City. One week Arsenal are first, and the next City take the lead. Their Champions League group was one of the hardest, and they managed to fin-

ish second. They will definitely be no pushover and Bayern Munich will have to give it their all.

Bayern Munich are also first in the Bundesliga, but are in a much more comfortable position than Arsenal as they are 13 points clear of second place. They finished the group stage of the Champions League with 15 points, only suffering a loss at the hands of Manchester City. Their manager is former Barcelona manager Pep Guardiola. Their squad is the same squad, if not a better squad than the one that demolished Barcelona in the Champions League semifinals last year and went on to claim the trophy.

On paper, Bayern Munich look like the better side, even if it is just a slight advantage.

On paper, Bayern Munich look like the better side even if it is just a slight advantage, but Arsenal's in-form squad will be a formidable opponent. If Mesut Ozil can work his magic, then Arsenal could be going into the quarterfinals as well. Whoever advances, soccer fans should keep an eye out for two legs of top-level competitive soccer in this matchup.

Bayer Leverkusen vs. Paris Saint-Germain

The meeting of Paris Saint-Germain and Bayer Leverkusen will most likely proceed as expected. Leverkusen currently sit in second place in the Bundesliga and are not quite in the range of

making a move to overtake Bayern Munich. They have performed well in the Champions League so far, but their two losses to Manchester United are a bad sign for their faceoff with a similarly lethal team.

Paris Saint-Germain have a fairly consistent run in all their competitions. They are also a goal-scoring machine with players like Edinson Cavani and Zlatan Ibrahimovic. Their sheer talent would be enough to see them through to the quarterfinals. Paris Saint-Germain will be the side to advance in this draw.

AC Milan vs. Atletico Madrid

This matchup may seem balanced at first. Nevertheless, Atletico Madrid will probably easily see off their opponents. AC Milan is just not living up to its name, currently sitting in tenth place in the Italian Serie A. They finished their Champions League Group second with nine points, behind Barcelona. They are inconsistent in their performances, and this is reflected on the scoreboard. For instance, they lost to Sassuolo, a side fighting to avoid relegation 4-3 on week 19 of the Italian Serie A. This loss resulted in the manager, Massimiliano Allegri, being replaced by former Milan midfielder Clarence Seedorf. Milan have managed to win their two games under Seedorf's guid-

ance, but how Seedorf will fare in the Champions League is still unknown.

As for Atletico Madrid, they are playing spectacular soccer this year and they are currently in first place in the Spanish La Liga, ahead of both Barcelona and Real Madrid. They have definitely brought some extra excitement to La Liga, which had been used to seeing Barcelona and Madrid battle it out for first place while the rest of the league fought for third. Atletico Madrid also exceeded expectations when they faced off against Barcelona in the league. Even though the match resulted in a 0-0 draw, Atletico Madrid was by far the better side and missed out on a numerous opportunities to pull ahead. The Madrid side has also performed well in the Champions League, finishing their group in first place with 16 points.

With new management, Milan may look to tip the matchup in their favor. But from Atletico Madrid's have been playing this year, Atletico Madrid will most likely cruise past Milan to find a place in the quarterfinals.

The first leg of these four matchups will take place on February 18 and 19. The second leg for these four matchups will be on March 11 and 12. Be sure to mark your calendars, as these four matchups will be tightly contested in both legs and the outcome will definitely be wonderful soccer!

UPCOMING HOME EVENTS

Wednesday, February 05

Squash vs. Tufts University 7 p.m., Zesiger Center Squash Courts

Women's Basketball vs. Wellesley College 7 p.m., Rockwell Cage



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